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**RACIALLY AND ETHNICALLY DIVERSE MIDLIFE WOMEN'S HEALTH NEEDS AND SYMPTOM EXPERIENCE DURING THE MENOPAUSAL TRANSITION**

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ABSTRACT

The menopausal transition (MT) and post-menopause involves a systemic development in which bothersome symptoms can occur. While symptoms occur for women across all racial and ethnic groups, some symptoms are worse for racially and ethnically diverse women compared to White women. Because of risks associated with hormone therapy, many midlife women seek evidence-based non-pharmacologic interventions. Acupuncture is one such evidence-based intervention, but barriers to access, such as cost, exist. Further, 75% of women who go to primary care or gynecologists for MT symptoms do not receive care for said symptoms. Thus, there is a lack of access for both acupuncture and medical care. This thesis presents the qualitative data gathered from an engagement session of 20 racially and ethnically diverse women in the MT and early post-menopause and their experiences physically, mentally, and socially. The results gathered address the participants' vasomotor symptom dimensions, age dimensions, social dimensions, and healthcare dimensions of their MT. The key findings are: 1) a need for more education of health care providers so they can then educate their patients, 2) more vocalization in the community about the hardships menopausal women may face, and 3) making evidenced based non-pharmacological methods, such as acupuncture, more available for women to use. These key findings provide directions for specific future research.

*Keywords:* acupuncture, evidence-based non-pharmacologic interventions, Group Medical Visits, perimenopause, menopausal transition, post-menopause.

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## BACKGROUND

Menopause is a natural biological process in which reproductive hormones, specifically estrogen, are no longer produced in the biological female's body. The mean age of menopause for women is 51 years old (Mayo Clinic, 2020). During this natural process, over 85% of midlife women experience multiple symptoms that interfere with their quality of life and daily activities (McKinlay, 1992). A faster menopausal-like transition may also occur following a hysterectomy.

The stereotypical symptom women have during menopause is hot flashes. However, women can also experience irregular periods, vaginal dryness, chills, night sweats, sleep problems, mood changes, weight gain and slowed metabolism, thinning hair and dry skin, and loss of breast fullness (Mayo Clinic 2020; Santoro, 2011). Many women experience multiple symptoms throughout their perimenopausal transition. Women of color, specifically African American women, are more likely to have heavier amounts of bleeding during their menstrual cycle and to undergo a hysterectomy (Santoro, 2011). In a Study of Women's Health Across the Nation (SWAN) study, 34.1-72.4% Hispanic women reported experiencing vasomotor symptoms versus 38.3% of non-Hispanic Caucasian women reporting said symptoms (Green et al., 2010).

In addition to the negative symptoms women may face, some evidence exists in the perimenopause literature that positive symptoms are experienced. Women from a 2006 qualitative study about the potential positive aspects of menopause expressed that they were of a "psychological or existential nature" and "seemed to outweigh the negative experiences which were mostly related to bodily changes or losses" (Hvas, 2006). The positive symptoms in this study indicated that women felt that they had "become more experienced and competent... gained more freedom... and perceived possibilities of personal development that made them able to hold on to their own opinions and better speak their minds" (Hvas, 2006). In contrast, a meta-

analysis of 18 studies concluded, “while some studies have found evidence of an association between menopausal symptoms and positive well-being, this effect seems to be largely driven by psychological symptoms of menopause” such as crying spells (Brown, 2015). While these two articles have valuable information regarding the positive aspects of menopause, there is a lack of recent research regarding this topic. The question of the overall quality of life that these women are facing remains.

The current gold standard treatment for menopausal symptoms is hormone therapy (HT) (*The NAMS 2017 Hormone Therapy Position Statement Advisory Panel, 2017*). While this treatment is effective in relieving vasomotor symptoms, HT may increase risks of breast cancer, stroke, and pulmonary embolism (Manson et al., 2013). Of those familiar with HT among the 1,039 women in the MT who were surveyed, 65% said they would not consider taking it (Bonafide, 2021). A 2013 review of 9 surveys of MT and post-menopausal women indicated that 50% of women used complementary and evidence-based non-pharmacologic interventions for symptom management (Posadzki et al., 2013). This gap between those who seek HT and those who do not but need some form of treatment can potentially be filled with evidence-based non-pharmacological interventions such as acupuncture. A study about the effects of acupuncture on perimenopausal vasomotor symptoms (VMS) that was conducted on 209 women showed promising results. Those who received the acupuncture reported VMS decline 36.7% at 6 months, while those in the control group reported an increased of 6.0% (Avis, 2016).

Regarding the symptoms women may face, “three out of four women who seek help for their care do not receive it” (AARP, n.d.). This could potentially be due to a lack of in-depth education that providers receive during school, but data are lacking in this respect. In relation, approximately one-third of the surveyed medical residents opted not to offer HT to a symptomatic, newly menopausal woman without safety contraindications or to a prematurely

menopausal woman until the natural age of menopause (*The NAMS 2017 Hormone Therapy Position Statement Advisory Panel*, 2017). There is a lack of literature regarding the training Nurse Practitioners receive about the MT during their schooling.

This study aimed to learn more about racially and ethnically diverse women's experiences surrounding the MT. The information was gathered to assist in developing an appropriate integrative medicine group visit (IMGV) for midlife women that will educate women about acupuncture and acupressure techniques as well as provide a safe community they can ask questions and share their experiences with an ultimate aim to diminish the gaps in accessing both evidence-based non-pharmacological interventions as well as medical care.

## METHODS

### **Ethics Statement**

Each participant in the study was provided a written consent form to read before the engagement studio and then provided verbal consent following the start of the engagement studio. The study was approved by the University of Utah Institutional Review Board (IRB\_00144633).

### **Community Engagement Session**

A two-hour community engagement session, which is a type of focus group, was held on September 28, 2021. The engagement session was designed to elicit female community members' opinions about their symptom experiences, access to medical care, and access to evidence-based non-pharmacological care (e.g., acupuncture, acupressure, massage therapy, chiropractic), along with their preferred methods of delivery and the usefulness of said care. We chose to utilize a community engagement session to allow for the research team to have the ability to consult with individuals who have the expertise regarding their own MT experiences and the care they have been receiving. The participants in the study were recruited through in-person referrals (with the assistance of the community collaboration and engagement team (CCET) at the University of Utah), flyers, existing community partnerships, word of mouth, social media, and referrals from participants of past studies. Each participant underwent screening through telephone or email. The inclusion criteria were: female, self-described, other, or prefers not to disclose sex/gender; has an intact uterus; aged 40-55; currently reporting poor menopause-related quality of life ( $\geq 3$  on a 0-6 scale); experiencing symptoms of hot flashes (severity  $\geq 3$  on a 0-10 scale) lasting for 6 or more months; willing to provide menstrual history which indicates either late transition (1+ missed periods in the last year) or early post-menopause

stage (within 2 years of the final menstrual period). In addition to these qualifications, they were asked if they would be able to provide informed consent and willing to sign an approved consent form that conforms to federal and IRB institutional guidelines

A template was created for the engagement session which included the five main questions asked. For the purpose of this thesis, the following question were analyzed:

1. What is your experience with perimenopause?
  - a. What are the physical changes? What about social changes or social pressures?

The questions were designed to be open-ended to facilitate a discussion. They were created with the intent to avoid bias from the facilitator, allowing participants to feel comfortable and remain honest. Participants were sent these questions and a brief description of the study a week before the engagement session took place.

The coordinator during the engagement session was from the CCET and thus independent and unrelated to the research team. She led the discussion by asking the aforementioned questions, relevant follow-up questions, and summarized the participants' comments in a document provided to the study team. Members of the research team attended the engagement session, introduced themselves and the study objectives, and listened to the discussion with cameras and microphones off. The engagement session was audio-recorded, transcribed, and coded by two research team members (LJTS and KS).

### **Data Analysis**

Qualitative research methods (Patton, 1990) were used to summarize the engagement session results. The engagement session was recorded and transcribed. The transcription was read and re-read by the two research team members (KS and LJTS), after which they

thematically coded the transcription. The two coders discussed each code until consensus was achieved. The data tables contain participants' quoted comments. While the comments have been edited for brevity, the original meaning of each participant's quote remains intact. Descriptive statistics were conducted using a calculator for the participant demographics.



## RESULTS

The question addressed in this thesis regards racially or ethnically diverse women's experience with menopause. Four themes were identified regarding women's experiences during their MT: their physical symptoms, the age at which their symptoms have occurred, the social intricacies they are facing, and the quality of support they receive from their medical providers.

For this study, we successfully recruited 20 women from racially or ethnically diverse backgrounds to participate in our demographic survey (see Table 1). The majority of our demographic survey participants were Caucasian (75%), with the average age being 46.9 years old (age range of 40-53). Nine women participated in the engagement session (see Table 1).

**Table 1**

*Demographic Characteristics of Community Engagement Session Participants*

Demographic Characteristics	N (%)	N (%)
	Recruited participants	Participants at the engagement session
Number of participants	20 (100%)	9 (100%)
Age range (years)	40-53	41-55
Race/ethnicity:		
Not reported	0 (0%)	0 (0%)
African American	2 (10%)	2 (22%)
Alaska Native/ American Indian	2 (10%)	1 (11%)
Asian	1 (5%)	1 (11%)
Caucasian	15 (75%)	5 (55%)
Hispanic	2 (10%)	2 (22%)
Pacific Islander	2 (10%)	1 (11%)
Multiple reported	(Yes)	(Yes)
Religious affiliations:		
Agnostic	5 (25%)	2 (22%)
Atheist	1 (5%)	1 (11%)
Christian (Catholic, Protestant, Adventist, Church of Jesus Christ of Latter-day Saints)	9 (45%)	3 (33%)

Muslim	1 (5%)	1 (11%)
Other	4 (20%)	2 (22%)
Approximate household income:		
Prefer not to disclose	2 (10%)	0 (0%)
<\$10,000	0 (0%)	0 (0%)
\$10,000-\$24,999	2 (10%)	1 (11%)
\$25,000-\$39,000	4 (20%)	3 (33%)
\$40,000-\$49,000	2 (10%)	0 (0%)
\$50,000-\$74,000	4 (20%)	2 (22%)
>\$75,000	6 (30%)	3 (33%)
Educational level:		
Not reported	0 (0%)	0 (0%)
High school or equivalent	3 (15%)	1 (11%)
Some college	5 (25%)	0 (0%)
Associate's degree	4 (20%)	2 (22%)
Bachelor's degree	4 (20%)	1 (11%)
Master's degree	1 (5%)	1 (11%)
Doctorate degree	3 (15%)	3 (33%)
Number of members in household:		
Not reported	0 (0%)	0 (0%)
Lives alone (1)	1 (5%)	1 (11%)
One other person (2)	7 (35%)	1 (11%)
Two other persons (3)	2 (10%)	1 (11%)
Three other persons (4)	5 (25%)	4 (44%)
Four other persons (5)	4 (20%)	2 (22%)
Five other persons (6)	1 (5%)	0 (0%)
Geographic area:		
Rural	1 (5%)	0 (0%)
Suburban	8 (40%)	4 (44%)
Urban	11 (55%)	5 (55%)

When asked, “what is your experience with perimenopause,” the participants named symptoms they had been experiencing. The symptoms mentioned were headaches, hot flashes, irregular periods, memory loss, mood changes, sleep disturbances, and vaginal dryness. Symptoms and perceptions of said symptoms are listed in Table 2. In addition, some women reported not experiencing symptoms, and others reported that they were unsure about the symptoms they were experiencing. Many of the women perceived a sense of solitariness about

the symptoms they were facing and wondered aloud, “are others having [specific symptom] too?” In addition, there were frequent mentions of the vasomotor symptoms being “frustrating” to deal with and “confusion” regarding what was occurring. None of the women mentioned having any positive symptoms or experiences.

**Table 2**

*Symptom Dimensions*

Symptoms:	Experience:	Perception:
Headache	"Headaches started coming since hot flashes"	--
	"Experienced headaches"	"Are others having headaches?"
Hot Flash	"Have had hot flashes"	--
Irregular Period	"Skipping and intermittent periods"	"Not knowing what to expect or when, that can be stressful"
	"Weird flow changes, weird consistency, more clumpy"	--
	"Last period was 7.5 weeks long"	"Feeling is a loss of control; I feel crazy, it's so hard to cope with complete extremes"
	"More inconsistent"	"It's been frustrating"
Memory Loss	"Changes in menstrual period"	--
	"Lately have been having trouble communicating because of forgetting certain words"	--
	"Feel like losing my memory"	--
Mood Change	"Forgetfulness all the time"	--
	"I think the PMS is getting more severe, feel just unraveled"	"Overwhelmed, it's unpleasant"
	"Something I find myself crying... feelings of lonely and nobody loves me"	"It's difficult and I don't know why"
	"The feeling is a loss of control"	"It is so hard to cope with"
Sleep Disturbance	"Anxiety and quick to be unnerved"	--
	"Have to take 5HTP and melatonin to shut off my brain"	--
	"Usually come home so tired, sleep on the way to bed... lately it's hard to fall asleep and	--

	commonly wake up at 5am for no reason"	
	"Hard time sleeping and staying asleep"	--
	"Lack of sleep"	--
Vaginal Dryness	"Had some vaginal dryness"	
No Symptoms:	"Never once had a hot flash and if anything felt colder"	"No idea what that's like"
	"I never experienced a single hot flash"	--
Unsure about Symptoms:	--	"Something is weird, something is going on"
	--	"Don't know what is going on basically"
	--	"Going to be 50 and haven't had the symptoms that I thought I would"
	"Mood and sleep problems"	"Did not related these symptoms to menopause"
	--	"What is this, what is going on? Why and I having these hot flashes?"

The engagement session participants also mentioned a variety of ages associated with the onset of various symptoms (see Table 3). Further, participants expressed confusion regarding the ages in which they were experiencing MT symptoms. Two women, ages 42 and 50, both lacked understanding about why they had not experienced any symptoms yet. This is contrasted by the experiences of women who had already been experiencing symptoms starting in their early 40s.

**Table 3**

*Age Dimensions*

Age	Onset of Symptoms
39	Intrauterine device removed, and periods have been irregular since.
Early 40s	Skipping and intermittent periods
41	Having troubles with mood and sleep
42	"Never experienced a hot flash, so maybe it's on its way?"

Mid 40s	Period stopped
50	“I’m going to be 50 and haven’t had the symptoms that I thought I would”

Furthermore, the engagement session participants were also facing challenging social dilemmas through the question of “what about social changes or social pressures?” Many of the women in the engagement session were a part of what is called the “sandwich generation,” meaning they are taking care of their children as well as their parents, and often while working outside the home. Some participants discussed how they would try and confide in their friends to compare and contrast each other’s peri-menopausal experiences. However, three women discussed how this was not possible because their friends were younger or had not had any menopausal transition symptoms yet. See Table 4.

**Table 4**

*Social Dimensions*

Occurrences	Interactions, Thoughts, and Feelings
Participants in the "Sandwich Generation"	Taking care of elderly parents and kids in middle school
Participants trying to confide in their friends	<p>“They have no idea what I am talking about”</p> <p>Friends do not know anything about menopause. They make fun of her and may say things like “oh you're old”</p> <p>“I currently do not have friends who are experiencing any symptoms, do not have friends who are experiencing any symptoms, do not really have anyone to talk to about this.”</p>
Basing anticipated menopausal experiences from mothers	Mom had a hysterectomy in her 40s, did not have perimenopause either. Hers was immediate.
Communication about the menopausal transition	Communication is needed in the community and between community people and their providers.

When discussing the experiences participants were facing during their MT, participants discussed how their healthcare provider has been either helpful or not helpful; how the sex or

gender of their provider had any effect on the care they were receiving; and if their providers treated them with pharmacologic methods or used “whole person care” approaches. The health care dimensions tables list themes related to healthcare providers (see Tables 5.1, 5.2, 5.3). Several women felt that the care they were receiving from doctors - specifically to address their perimenopause - was unsatisfactory. One participant was seen by a nurse practitioner, and she felt satisfied by her visit.

**Table 5.1**

*Health Care Dimensions; Care Provided*

Participants' Perceptions of the Listed Topics	
Unhelpful care from provider	<p>Doctor never associated their symptoms with menopause.</p> <p>Doctor thinks their symptoms have something to do with medication.</p> <p>Frustrating with listening to her doctor when she goes in. Seems like 15-minute office visit with doctor because of symptoms, then blood work and doctor said that they are fine and instead they feel "crazy." Doctor has not associated symptoms with menopause or had a conversation with her and she is 50 years old.</p> <p>Male doctor ran bloodwork and said participant was not in perimenopause even though she had many symptoms.</p>
Helpful Care from Provider	<p>Nurse Practitioner was profoundly different than with male gynecologist, it was helpful, and she treated her as a whole person.</p> <p>Gynecologist she saw was great, but only had "medical fixes."</p> <p>Participant appreciated that her male health care provider immediately asked if she was having irregular periods regarding her symptoms of trouble sleeping and mood changes.</p>

**Table 5.2**

*Health Care Dimensions; Sex of the Provider*

Participants' Perceptions of the Listed Topic	
Sex of the provider	<p>“More comfortable talking to women providers that are within the menopausal range versus that of being in their 20's or being male.”</p> <p>Male gynecologist expressed that he cannot come from a place of experience while discussing pre-menopausal symptoms.</p> <p>She appreciated that her provider asked about her periods, even though he was male.</p>

**Table 5.3***Health Care Dimensions; Pharmacologic versus Whole Person Care*

Participants Perceptions of the Listed Topic	
Pharmacologic fixes versus whole person care	<p>“Am I in need of a change of dose? Change medication?”</p> <p>“There should have been a discussion before giving a different medication.”</p> <p>She just thought she needed a change of medication.</p> <p>“Not just about the medication or prescription; it is about helping a whole woman through this process.”</p>

## DISCUSSION

### **Principal Findings**

Participants of the engagement session gave detailed descriptions of the symptoms they experienced physically, mentally, and socially. The symptoms they experienced were headaches, hot flashes, irregular periods, memory loss, mood changes, sleep disturbances, and vaginal dryness. Some women did not understand their symptoms, and a few women did not experience any vasomotor symptoms. The earliest age that a participant experienced symptoms was 39 years old, whereas another participant was 50 years old and had not had any noticeable symptoms yet. Furthermore, participants discussed social hardships resulting from caretaking for children and parents while facing numerous vasomotor symptoms, not having friends in the MT, and not having MT experiences or symptoms similar to their mother's reports.

There was voiced confusion if the symptoms the women were experiencing were menopausally- or pharmacologically-based, and/or was "normal" or not. Many women reported posing this question to their healthcare providers, but not all received helpful answers. Many of the participants saw their primary healthcare provider who was a male MD, while some saw gynecologists of both genders, and only one visited with a female nurse practitioner.

### **Strengths and Limitations**

The main strength of this engagement session is the ethnic and racial diversity of women involved in the study. The shared opinions of the women came from numerous different ethnicities, residential locations, and socioeconomic statuses. Another strength of the study is the participants' openness: study participants were highly engaged in the conversation and candid in what they shared.

One limitation of this study was the small number of participants that were involved in the engagement session (n=9). A second limitation is that the session was only two hours long. A



third limitation was the outreach into the community about the existence of this engagement session. While many women within the target population were reached, the group size could have been larger. Fourth, we lacked diversity in our sample with respect to hormone therapy (HT). None of the women participants mentioned receiving HT to treat their symptoms. Therefore, no observations can be made in this study about the benefits, drawbacks, or other related issues concerning HT and the positive or negative experiences of those taking HT. Lastly, one point of our inclusion criteria included women who self-reported that they were experiencing or experienced symptoms of hot flashes (severity  $\geq 3$  on a 0-10 scale) lasting for 6 or more months, however due to an administration error, a few of the women in the engagement session had reported no on this question.

### **Meaning of Study**

This thesis affirms prior findings regarding vasomotor symptoms and perceptions of women throughout the MT. All but one of the women in the engagement session had experienced vasomotor symptoms that had an effect on their emotional and physical status. The women whom experienced “loneliness” and/or confusion about their symptoms needed better education and a sense of community for their MT. This anecdotal evidence complements the published research regarding poor education of medical students during their residency because it describes both the reason for better education and the area in which the knowledge gap for such education occurs (*The NAMS 2017 Hormone Therapy Position Statement Advisory Panel, 2017*).

### **Implications for Future Research**

Through this engagement session, we learned that while the specific symptoms and experiences of menopause vary from woman to woman, many women experience hardship in

trying to manage their symptoms, healthcare system, and social networks (see Tables 2, 3, 4, 5.1,5.2,5.3). Therefore, there is a need for a greater community for women to gather and share those experiences and hardships. The essential concern that needs to be addressed is increasing the education of the next generation of clinicians to allow for future effective education of patients. Therefore, this will develop easier access to menopausal symptom management that is not solely hormone therapy.

## CONCLUSION

More education and research are necessary to properly give whole person care to peri- and post-menopausal women. As illustrated by this engagement session, more research specifically needs to be conducted to regarding the helpfulness of male versus female providers and doctors versus nurse practitioners. With this education, there should be an emphasis on treating the whole person, and educating all providers on best practices in treating patients in the MT.

While more research is needed regarding Group Medical Visits (GMVs) in relation to the MT, GMVs have been shown to improve individuals' comfort with their health needs in other populations. Evidence-based non-pharmacologic interventions have already shown promise in assisting with women's vasomotor symptoms. Since the current first line treatment for menopause, hormone therapy, is something most women do not want to take, evidence-based non-pharmacologic interventions and Group Medical Visits may be able fill in a gap in care.

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